PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : G01J	A2	(11) International Publication Number: WO 95/24618
		(43) International Publication Date: 14 September 1995 (14.09.95)

(21) International Application Number: PCT/IB95/00133

(22) International Filing Date: 3 March 1995 (03.03.95)

(30) Priority Data:
94200636.2 11 March 1994 (11.03.94) EP
(34) Countries for which the regional or international application was filed: NL et al.

(71) Applicant: PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(71) Applicant *(for SE only)*: PHILIPS NORDEN AB [SE/SE]; Kottbygatan 5, Kista, S-164 85 Stockholm (SE).

(72) Inventors: DRENTEN, Ronald, Reindert; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL). JONGERIUS, Michiel, Johannes; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL). DROSTE, Richard, Bernardus, Johannes; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(74) Agent: FAESSEN, Louis, Marie, Hubertus; Internationaal Octrooibureau B.V., P.O. Box 220, NL-5600 AE Eindhoven (NL).

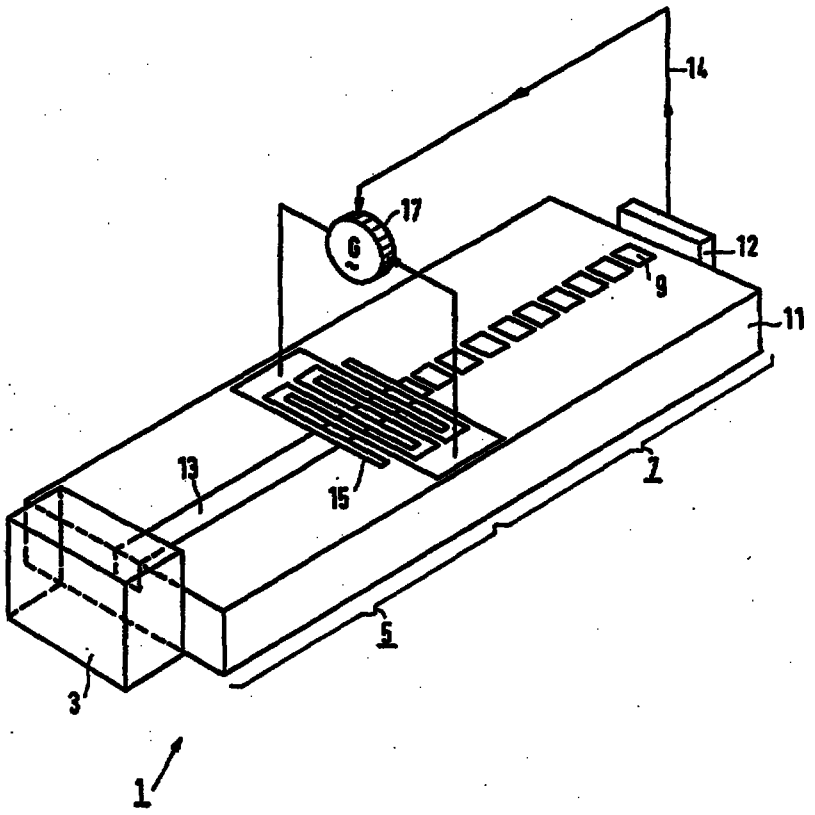
(81) Designated States: CN, JP, KR, SG, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

Published
Without international search report and to be republished upon receipt of that report.

(54) Title: DEVICE FOR RAISING THE FREQUENCY OF ELECTROMAGNETIC RADIATION

(57) Abstract

Device (1) for raising the frequency of electromagnetic radiation. The device (1) comprises a diode laser (3) for generating the radiation, and a non-linear optical medium (11) in which a first optical waveguide (9) is arranged for guiding a fundamental wave of the diode laser radiation while forming a higher harmonic wave. Moreover, the device (1) comprises a wavelength stabilizer (5) for stabilizing the wavelength of the fundamental wave. The wavelength stabilizer (5) is constituted by a second optical waveguide (13) with a refractive index grating extending in its longitudinal direction and whose selection wavelength is electrically controllable by means of an electrode structure (15; 29).



FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AT	Austria	**GB**	United Kingdom	**MR**	Mauritania
AU	Australia	**GE**	Georgia	**MW**	Malawi
BB	Barbados	**GN**	Guinea	**NE**	Niger
BE	Belgium	**GR**	Greece	**NL**	Netherlands
BF	Burkina Faso	**HU**	Hungary	**NO**	Norway
BG	Bulgaria	**IE**	Ireland	**NZ**	New Zealand
BJ	Benin	**IT**	Italy	**PL**	Poland
BR	Brazil	**JP**	Japan	**PT**	Portugal
BY	Belarus	**KE**	Kenya	**RO**	Romania
CA	Canada	**KG**	Kyrgystan	**RU**	Russian Federation
CF	Central African Republic	**KP**	Democratic People's Republic of Korea	**SD**	Sudan
CG	Congo			**SE**	Sweden
CH	Switzerland	**KR**	Republic of Korea	**SI**	Slovenia
CI	Côte d'Ivoire	**KZ**	Kazakhstan	**SK**	Slovakia
CM	Cameroon	**LI**	Liechtenstein	**SN**	Senegal
CN	China	**LK**	Sri Lanka	**TD**	Chad
CS	Czechoslovakia	**LU**	Luxembourg	**TG**	Togo
CZ	Czech Republic	**LV**	Latvia	**TJ**	Tajikistan
DE	Germany	**MC**	Monaco	**TT**	Trinidad and Tobago
DK	Denmark	**MD**	Republic of Moldova	**UA**	Ukraine
ES	Spain	**MG**	Madagascar	**US**	United States of America
FI	Finland	**ML**	Mali	**UZ**	Uzbekistan
FR	France	**MN**	Mongolia	**VN**	Viet Nam
GA	Gabon				